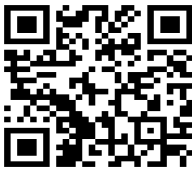


TO APPLY



REGISTER ONLINE



## Computational Thinking & Construction

Building MATH in CTE: Computational Thinking & Construction is a research based professional development program offered by MSU's 21<sup>st</sup> Century Education Enterprise, Department of Engineering & Technology Management, and Department of Mathematics & Physics. During the program, high school mathematics and career and technical education teachers will collaboratively design Kentucky Academic Standards (KAS) aligned instruction that fosters classroom environments rich in authentic mathematical practices aimed at improving college and career readiness among their students.

**Teacher Participants will:** Implement *individualized* action plans with cross-curricular lessons into curriculum to (1) improve student learning by developing cross-curricular math-enhanced CTE lesson plans using Math-in-CTE framework, (2) increase teacher effectiveness by developing a community of practice to sustain integration of math-enhanced lessons in CTE courses throughout the school year, and (3) increase College & Career Readiness for all students by maximizing mathematical thinking in the CTE instruction by reinforcing math concepts embedded in curriculum.

**Summer Institute:** Teacher participants will attend a 5-day summer institute at Morehead State University July 17-21 from 9:00 am to 3:00 pm daily. Using the Math-in-CTE framework, teachers will develop lessons and create units with individualized action plans.

**On-going Professional Learning:** During the 2017-2018 academic year, teacher participants will implement the developed lessons from their action plans in their classrooms. CTE and mathematics content experts from Morehead State University, Kentucky Community & Technology College System (KCTCS), and collaborating districts will add content support and mentoring through ongoing, job-embedded professional development.

**On-line Learning Community:** Project staff will develop an online community space to support the Institute sessions, which will include discussion areas for organized and informal discussions, a resource library, surveys and announcements.

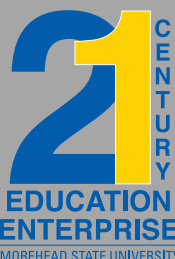
**Culminating Showcase:** In the Spring, teacher & student teams will meet again to share their successes, challenges and outcomes from the lessons and curricula implemented in action plans.

Registration link: [https://www.surveymonkey.com/r/Math\\_in\\_CTE](https://www.surveymonkey.com/r/Math_in_CTE)



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